State of Illinois
Department of Transportation
Division of Highways
Springfield

———

SPECIFICATIONS
FOR
POLYETHLENE PLASTIC MESH SNOW FENCE

Serial Number: M131-92

I. GENERAL

This specification covers polyethylene plastic mesh snow fence used for snow drift prevention.

II. MATERIALS

The following physical properties shall be met.

PROPERTIES	TEST METHOD	UNITS	VALUE
Ribs			
Tensile Strength[1]	GRI-GG1-87[2]	lb./ft. of fence width	1850 (min)
Junctions			
Tensile Strength	GRI-GG2-87[3]	lb./ft. of fence width	1480 (min)
Aperture Size			
Open Area	COE Method[4]	%	50 (nom)
Material			
High Density Polyethylene	ASTM D1248 Type III/Class B/ Grade E5 or Grade P24	%	97.5 (min)
Ultraviolet Resistance			
2% (min) Carbon Black or fully stabilized	ASTM D4218		
Color			
Black or Orange as Specified			
Temperature Range			
Minimum Strengths Maintained		ºF	-60 to 150

Dimensions		
Roll Length	ft.	50/100
Roll Width	ft.	4
Roll Weight	lb.	20/39 (min)

Notes:

1. Measured along roll length.

2. Peak tensile strength measured by Geosynthetic Research Institute test method GG1-87 “Geogrid Tensile Strength”.

3. Geogrid junction strength and junction efficiency measured by Geosynthetic Research Institute test method GG2-87 “Geogrid Junction Strength”.

4. Percent open area measured without magnification by Corps of Engineers method as specified in CW 02215 Civil Works Construction Guide, November 1977.

III. FABRICATION

The geogrid shall be a regular grid structure formed by uniaxially drawing a continuous sheet of select high density polyethylene material and shall have aperture geometry and rib and junction cross-section sufficient for optimum snow trapping efficiency. The geogrid shall have high continuity of tensile strength through all ribs and junctions of the grid structure. The geogrid shall also be resistant to ultraviolet degradation deterioration.

IV. TESTS

The supplier shall furnish the manufacturer’s certification that the resin used in the manufacture of polyethylene plastic mesh snow fence meets the physical tests set forth in paragraph II, Materials. The Department at its option may perform any of the tests necessary to establish conformance with this specification. When required by the engineer, a 36-inch long, full height sample shall be furnished for each 2,500 feet of fence or fraction thereof for each manufacturing lot. Additional samples may be required at the Department’s option.

V. SHIPPING

Polyethylene plastic mesh snow fence shall be shipped in 50- or 100-foot rolls.

Effective November 1, 1992